REMARKS/ARGUMENTS

At the outset, the applicant notes that the subject matter of the claims was commonly owned at the time the invention was made.

35 USC § 102(b)

Claims 1, 5-8, and 12 were rejected under 35 USC § 102(b) as being anticipated by Madsen (U.S. Pat. No. 1,768,468). The Applicant disagrees.

Amended claim 1 expressly recites "...a mixture of a liquid fluid and a gaseous fluid in upward motion and disposed in the space..." As claims 5-8, and 12 depend on amended claim 1, the same limitations apply. Clearly, ***Madsen fails to teach a mixture of a liquid fluid and a gaseous fluid in upward motion that is disposed in a space between the riser and the cap***. If the Examiner insists on the anticipation rejection, the applicant respectfully request reference to the specific teaching of the mixture of the liquid fluid and gaseous fluid in upward motion in the space.

35 USC § 103

Claims 2-4, and 9-10 were rejected under 35 USC § 103 as being obvious over Madsen. The Applicant once more disagrees. Among other things, each and every element must be taught or suggested by the reference. As discussed above, this is not the case, as Madsen fails to teach a mixture of a liquid fluid and a gaseous fluid in upward motion that is disposed in the space between the riser and the cap.

Furthermore, it should be noted that ***Madsen teaches against a co-current transport of a mixture of a liquid fluid and a gaseous fluid with an upward motion in the space*** between riser and cap. Madsen teaches an air purifier in which only air moves upwards and exits the cap into a layer of water. If water and air would be moving and disposed as presently claimed, Madsen's device would spray a work area with an air/water mixture rather than remove the air from the work area. The ***applicant respectfully requests express consideration of that fact*** in light of the alleged obviousness, and especially ***where in Madsen or the knowledge of a person of ordinary***

skill in the art a suggestion or motivation could be found to modify Madsen such as to arrive at the subject matter presently claimed. Otherwise, the applicant requests that the obviousness rejection is withdrawn.

Claim 11 was rejected under 35 USC § 103 as being obvious over Madsen in view of Jacobs. The Applicant again disagrees. Among other things, Madsen cannot be properly applied as an obviousness type reference. Thus, combination of Madsen with Jacobs is also improper for the same reasons as provided above.

Claim 1-10, and 12 were rejected under 35 USC § 103 as being obvious over Madsen in view of Ballard. The Applicant again disagrees. Among other things, Madsen cannot be properly applied as an obviousness type reference. Thus, combination of Madsen with Ballard is also improper for the same reasons as provided above.

Claim 11 was further rejected under 35 USC § 103 as being obvious over Madsen in view of Ballard and further view of Jacobs. The Applicant disagrees. Again, Madsen cannot be properly applied as an obviousness type reference. Thus, combination of Madsen with Ballard and Jacobs is also improper for the same reasons as provided above.

Claim 13 was rejected under 35 USC § 103 as being obvious over Madsen in view of Bolles. The Applicant disagrees. Once more, Madsen cannot be properly applied as an obviousness type reference. Thus, combination of Madsen with Bolles is also improper for the same reasons as provided above.

Claim 14-20 were rejected under 35 USC § 103 as being obvious over Ballard in view of Madsen. The Applicant again disagrees. Among other things, Madsen cannot be properly applied as an obviousness type reference. Thus, combination of Ballard with Madsen is also improper for the same reasons as provided above.

The applicant believes that the present claim amendments are sufficient to overcome the Examiner's concerns and believes that the claims as amended are now in condition for allowance. Therefore, the applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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By _____

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